ES.0 EXECUTIVE SUMMARY

The executive summary is designed to give the reader an overview of the Environmental Assessment that follows this section. The executive summary will include the following;

- A brief description of proposed project area
- A summary description of the proposed action
- A list of actions required for the proposed action
- A summary of the build alternatives, including alternatives considered but eliminated
- A table of environmental impacts

ES.1 Proposed Project Area

SR-212/Telegraph Street is located in Washington City, Utah (**Figure 1-1**). Washington City is within Washington County and is located in the southwest corner of the state. Telegraph Street starts at the I-15 Interchange at milepost (MP) 10 and extends to State Route 9. The section of Telegraph Street that starts at MP 10 and continues to 300 East is considered State Route (SR) 212.

The proposed project would begin at 500 West on Telegraph Street and continue east to 300 East Telegraph Street, a distance of approximately ¾-mile. This portion of Telegraph Street is a three-lane roadway, consisting of two travel lanes with a center turn lane and reducing to two lanes on the bridge over Mill Creek. The roadway just outside of this portion of Telegraph Street, on the east and west, is a five-lane roadway, consisting of two travel lanes and a median.

ES.2 Proposed Action

Improvements to this section of Telegraph Street are proposed to accommodate existing and projected traffic levels. The proposed improvements include widening to a five-lane section with four travel lanes and a median to match the rest of the Telegraph Street corridor and replacing the Mill Creek Bridge to accommodate the same typical section. Sidewalks and parkstrips will also be provided for pedestrians. Other opportunities for corridor beautification, in addition to parkstrips, have been identified by Washington City; such measures will be accommodated to the extent practicable in the proposed project.

ES.3 Action Required for the Proposed Action

Following is a list of actions that are required for the proposed action.

- Right-of-Way (ROW) acquisition
- Relocation of affected structures
- Develop Best Management Practices for erosion control, salinity management, and groundwater protection
- Obtain construction permits from Washington City
- Jointly Obtain a Corps of Engineers (COE) Regional General Permit (RGP 40) under Section 404 of the Clean Water Act and a Utah State Stream Alteration Permit (for the bridge)
- Develop a revegetation plan for areas that would be temporarily disturbed during construction
- Develop and approve a Memorandum of Agreement between Federal Highway Administration, Utah State Historic Preservation Officer, Utah Department of Transportation, and Washington City

ES.4 Summary of Build Alternatives

A range of alternatives was developed and evaluated for the proposed action. The initial list of alternatives was not constrained by mode, ability to meet the Purpose and Need, or cost. The intent was to begin with a broad list of specific and independent actions that could be evaluated using accepted engineering design criteria and factors representing potential environmental constraints in the project study corridor. The alternatives developed by the project team for evaluation and screening are described in the following sections.

ES.4.1 Alternative One

Alternative One (**Figure 2.1**) would improve the corridor's continuity by widening Telegraph Street to a 95-foot right-of-way (ROW) section and matching the lane configuration to that which already exists west of 500 West and east of 300 East . From 500 West to 200 West, widening of the road would be symmetrical about the road centerline and designed to align with the current road west of the 500 West and Telegraph Street intersection. From 200 West to Main Street, widening of the road would be shifted to the north by 29 feet from the current centerline in order to minimize impacts to historic properties. From Main Street to 300 East, the widening of the road would be shifted 29 feet to the south from the current roadway centerline in order to minimize impacts to historic properties. **Figure 2.1** uses yellow directional arrows to show the direction of the shift in roadway alignment throughout the corridor. The roadway widening would be designed to meet the needs identified in the 2005 Washington City TMP and the proposed project Purpose and Need.

The proposed roadway would include two lanes in each direction and a center turn lane or a raised median with landscaping**.** The raised medians would be installed from approximately 450 West to 250 West, 150 West through the 100 West intersection to approximately 50 West, and from 150 East through the 200 East intersection to 250 East. The location of the medians would be the same for all of the build alternatives. **Figure 2.7** is an aerial view showing the median locations that would be typical for all the build alternatives.

Figure 2.2 shows the typical roadway cross-section for the planned improvements in Alternative One, including:

- 1-foot ROW outside of sidewalks
- 5-foot sidewalks and 4-foot parkstrips on both sides of the roadway
- 2½-foot curb and gutter section on both sides of the roadway
- 4-foot shoulders on both sides of the roadway
- Four 12-foot travel lanes
- 14-foot raised median or center turn lane

Alternative One addresses the need for the proposed action by providing improved functionality, safety, capacity, and access in the project study area. It also addresses traffic congestion by increasing capacity through roadway widening and additional lanes for larger traffic volumes. The signalized intersections for this alternative would operate at a LOS D or better in the year 2030. Pedestrian safety is addressed by maintaining a 5-foot sidewalk along Telegraph Street and adding a 4-foot parkstrip with landscaping. Reconstruction of sidewalks would also address the absence of ADA-compliant pedestrian access. The parkstrip would provide a visual improvement to enhance the community and also offer an increased measure of safety for pedestrians.

ES.4.1.2 Alternative One – Narrow Option

The project team developed the Narrow Option under Alternative One (**Figure 2.3**) to provide an alternative that would have less impact on ROW and fewer resulting potential relocations. These adjustments to Alternative One would decrease the total width of the roadway by 10 feet to 85 feet. The typical roadway cross-section for the Narrow Option (**Figure 2.4**) would include:

- 5-foot sidewalks and 4-foot parkstrips on both sides of the roadway
- 2½-foot curb and gutter section on both sides of the roadway
- 2-foot shoulders on both sides of the roadway
- Four 11-foot travel lanes
- 14-foot raised median or center turn lane

The Narrow Option would require the same shifts to the north and south to protect historic properties as Alternative One (**Figure 2.1**)**.** This option would decrease the amount of new ROW needed, decrease the number of potential business and residential relocations, minimize the impacts to 4(f) and 6(f) properties, and reduce the overall cost of Alternative One.

ES.4.2 Alternative Two

Alternative Two (**Figure 2.5**) also calls for widening and improvements to Telegraph Street from 500 West to 300 East. This alternative would improve the continuity of the corridor by widening Telegraph Street to a 95-foot ROW throughout the corridor. From 500 West to 200 West, the radius of the curve would be increased, necessitating a shift of the roadway to the south by a maximum of 12 feet from the current centerline. From 200 West to 300 East, the roadway would be shifted 29 feet to the north from the current roadway centerline. **Figure 2.5** shows the shift in the roadway alignment using yellow directional arrows throughout the corridor. By shifting the new wider road to the north, the Alternative Two design would minimizes impacts to some historic properties while creating other potential business and residential relocations. The roadway width would be increased to meet the needs identified in the 2005 Washington City TMP and the proposed action Purpose and Need.

The proposed roadway would include two lanes in each direction with a center turn lane or raised median with landscaping. The median locations would be the same as those described under Alternative One (Section ES.4.1).

Figure 2.2 shows the typical roadway cross-section for the planned improvements in Alternative Two.

Alternative Two also addresses the need for the proposed action by providing improved functionality, safety, capacity, and access in the project study area. It addresses traffic congestion by increasing capacity through roadway widening and additional lanes for larger traffic volumes. The signalized intersections for this alternative would operate at a LOS D or better in the year 2030. Pedestrian safety is addressed by maintaining a 5-foot sidewalk along Telegraph Street and adding a 4-foot parkstrip with landscaping. Reconstruction of sidewalks would also address the absence of ADA-compliant pedestrian access. The parkstrip would provide a visual improvement and enhancement to the community and also offer an increased measure of safety for pedestrians.

ES.4.2.1 Alternative Two – Narrow Option

The Narrow Option under Alternative Two (**Figure 2.6**) would decrease the width of through lanes, the center turn lane, and the shoulder of the roadway. These adjustments would decrease the total width of the roadway by 10 feet to 85 feet. The adjustments would have less impact on ROW and fewer resulting potential relocations than the

standard cross section. A typical roadway cross-section for the Narrow Option is shown in **Figure 2.4**.

This option would decrease the amount of ROW required from that required for the standard width option. Reducing the amount of ROW required would decrease the number of potential business and residential relocations, minimize the impacts to some 4(f) and 6(f) properties, and reduce the overall cost of Alternative Two.

ES.4.3 Alternative Three – Narrow (Preferred Alternative)

Alternative Three (**Figure 2.7**) was developed using the narrow typical section only. This alternative would have the same typical cross-section as Alternatives One – Narrow and Two – Narrow (**Figure 2.4**). The alignment from the intersection of Telegraph Street and 500 West to the 200 West intersection would be the same as Alternative Two – Narrow, which means it would be shifted to the south . From 200 West to about ½ block west of Main Street the roadway alignment would also be the same as Alternative Two – Narrow and would be shifted to the north. From just west of Main Street to the intersection of Main the alignment of the road would be shifted to the south. As Telegraph Street passes through the intersection at Main Street the alignment of the road would start to shift to the north once again. At about 50 East the road is centered on the existing roadway and continues to be centered on the existing roadway until the end of the Project Area (300 East). The shifts in road alignment are shown on **Figure 2.7** using yellow arrows.

Alternative Three – Narrow (Preferred Alternative) would satisfy the proposed action Purpose and Need. The signalized intersections would operate at a LOS D or better in the year 2030. Sidewalks would be reconstructed and widened to 5 feet to make them ADA-compliant and safer for pedestrians and people with disabilities. Four-foot parkstrips would also be included in the roadway design. The overall goal of Alternative Three – Narrow (Preferred Alternative) is to reduce the amount of potential relocations that would be required, thereby reducing overall cost.

ES.4.4 Alternative Four

Alternative Four (**Figure 2.8**) would create a one-way couplet. Westbound traffic would travel along Telegraph Street, and eastbound traffic would travel along 100 South. A roundabout would be built at the intersection of 300 East and 100 South to facilitate this traffic flow. Improvements and some widening would be made to Telegraph Street from 500 West to 300 East and 100 South from 500 West to 300 East in Washington City.

The proposed roadway would include two lanes on Telegraph Street and 100 South and left-turn and right-turn pockets where needed. The roadway design would also include the construction of a new section of road between 500 West and 200 West that would split the traffic on Telegraph Street to shift eastbound traffic to 100 South. This new section of road would require a new bridge crossing over Mill Creek.

This alternative was developed as a way to avoid any potential relocations of businesses or residences along Telegraph Street, and also as a way to keep Telegraph Street at it's current width.

ES.4.4.1 Alternative Four – Option A

Option A (**Figure 2.9**) would shift the roundabout 200 feet to the east from 300 East and 100 South to 200 East and 100 South. Moving the roundabout to the west would allow two-way traffic on 100 South between 200 East and 300 East. The section of Telegraph Street from 200 East to 300 East would be designed as a four-lane road with a center turn lane. Moving the roundabout would also reduce the amount of traffic traveling north along 300 East between 100 South and Telegraph Street. Eastbound traffic wanting to travel south on 300 East would remain on 100 South and turn right at the intersection of 100 South and 300 East.

ES.4.4.2 Alternative Four – Option B

Option B (**Figure 2.10**) calls for a traffic signal at the intersection of 300 East and 100 South instead of a roundabout. The resulting T-intersection would reduce the number of potential relocations required to construct a roundabout. The lane configuration would remain the same as the base Alternative Four.

ES.4.4.3 Alternative Four – Option C

Option C (**Figure 2.11**) combines elements of Alternative Two – Narrow Option, Alternative Four, and new features unique to this option. It proposes a one-way couplet that would use Telegraph Street and 100 South, but would not require the construction of a new road section from Telegraph Street to 100 South across Mill Creek. Instead, the one-way couplet would start at 200 West. 200 West would remain a two-way street; however, there would be two lanes for southbound traffic and one lane for northbound traffic. Between its intersections with 200 West and 300 East, 100 South would be one-way. At 300 East, a T-intersection similar to Option B would be constructed, and 300 East would remain a two-way street.

The goal of Option C is to minimize the potential impacts to Mill Creek that would result from construction of a new bridge just south of Telegraph Street required under the other options to connect the road with 100 South. Option C would avoid creating a new crossing over Mill Creek, thus minimizing impacts to natural resources in the creek, including wetlands and wildlife. This option would also decrease the overall cost of Alternative Four by eliminating the need to design and build a new section of road.

ES.5 Preferred Alternative

Alternative Three – Narrow has been identified as the Preferred Alternative for the Proposed Action. This decision was based on the outcome of the alternatives screening

process conducted by the Stakeholder Committee, and by the consensus of the project team (See Chapter Two).

ES.6 Alternatives Eliminated from Further Consideration

As a result of the alternatives screening process, it was determined that Alternative Four would not be carried forward for further analysis in this EA. Alternative Four, along with its associated options, does not meet the Purpose and Need of the Telegraph Street project because it would not improve safety. In fact, Alternative Four may create new safety concerns resulting from the additional traffic routed onto 100 South and the resulting increased congestion in the area. In addition, Alternative Four would have a negative effect on the community by making it more difficult for residents in adjoining neighborhoods to reach businesses in the Historic Downtown area. Finally, the traffic movements imposed by the one-way couplet have the potential to frustrate both businesses and customers and potentially encourage some businesses to relocate outside of the Historic Downtown.

ES.7 Environmental Impacts

The following table (**Table ES.1**) summarizes impacts to environmental resources by build alternative. Some resources are not included in this table as the resource would be impacted in the same way across all of the build alternatives.

Table ES.1 – Summary of Environmental Impacts by Resource and Build Alternative

Impact Category	Build Alternative				
	One	**One-Narrow**	**Two**	**Two-Narrow**	**Three-Narrow (Preferred Alternative)**
Land Use (acres) -Converted to Highway use	1.56	1.32	1.81	1.41	1.66
Potential Relocations (Total #) -Residences -Businesses	4 7	1 3	2 5	2 2	1 2
Recreation Resources (acres) -Nisson Park -Veteran's Park	0.02 0.009	0.00 0.004	0.11 0.029	0.07 0.024	0.07 0.004
Wetlands (acres) -Filled -Temporarily Impacted	0.0098 0.0039	0.0079 0.0039	0.0106 0.0035	0.0089 0.0037	0.0089 0.0037
Other Water Feature (linear feet) -Permanently Impacted -Temporarily Impacted	27 90	23 73	0 100	0 68	0 68
Wildlife Habitat (acres) -Permanently Impacted -Temporarily Impacted	0.05 0.05	0.03 0.06	0.09 0.06	0.06 0.07	0.06 0.07
Historic Resources (Total #) -Complete Acquisition -Minor ROW Acquisition	3 3	2 3	3 2	2 3	1 3
Section 4(f) Use – (other than *de minimis)*	3	2	3	2	1

Source: URS 2006